

**Notice of Allowability**

Application No.

10/603,349

Applicant(s)

GRAUMANN, DAVID L.

Examiner

Brian T. Pendleton

Art Unit

2615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment on 10/2/06.
2. ☒ The allowed claim(s) is/are 2-18, 20-36 and 38-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 2-18, 20-36, and 38-43 are allowed.

The following is an examiner's statement of reasons for allowance: The closest prior art of record, Basel and newly cited references to Murata et al, US Patent Application Publication 2002/0012437 and Ford et al, US Patent Application 2002/0159607, do not disclose nor suggest the limitations of independent claims 2, 9, 20, 27, 38, 40, and 43. Basel discloses analyzing an input audio signal to determine a power spectral density profile, comparing the power spectral density profile with a template profile, and selectively attenuating frequency bands of the input audio signal based on the comparing. However, Basel does not disclose comparing the power spectral density profile with a plurality of template profiles, as required by claims 2, 20, and 38. Basel is directed toward equalizing an audio signal to only one equalization reference profile and does not suggest a plurality of profiles. Regarding claims 9, 27, and 40, Basel does not disclose adjusting the power spectral density profile to form an adjusted power spectral density profile for comparison. As to claim 43, the claim requires the audio signal to be received via an antenna of a cellular phone. Basel is directed to a audio source medium such as a CD player, DVD player, or cassette. Murata et al disclose an audio reproducing apparatus comprising reproducing section 8, discriminator 14, controller 15, standard data storing area 17, and frequency character adjustor 11. An attribute of the input audio stream from reproducing section 8 is discriminated by discriminator 14 and equalization coefficients stored in standard data storing area 17 are used by frequency character adjustor to shape the input audio signal. However, the equalization is based on attributes of the input signal, such as audio coding mode, sampling frequency, quantization,

Art Unit: 2615

and number of channels (see figures 3 and 4), not an analysis of the input audio signal.

Therefore, Murata et al do not disclose the feature of analyzing an input audio signal to determine a power spectral density profile as recited in the independent claims. Ford et al disclose automatically equalizing a digital audio source based on a sound type comprising digital audio source 105, controller 115, source information database 120, equalization coefficient database 130, and digital equalizer 110. However, like Murata et al, Ford et al equalizes the sound based on an audio header file included in the digital audio source (see figures 2 and 3). Therefore, Ford et al do not disclose the feature of analyzing an input audio signal to determine a power spectral density profile as recited in the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Pendleton  
Primary Examiner  
Art Unit 2615

btp

  
**BRIAN TYRONE PENDLETON**  
**PRIMARY EXAMINER**